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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,997

06/18/2007

Kristina Gold

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54414

7590

11/12/2009

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EXAMINER

DUONG, DIEU HIEN

ART UNIT

PAPER NUMBER

2821

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,997	<b>Applicant(s)</b> GOLD, KRISTINA	
	<b>Examiner</b> DIEU HIEN T. DUONG	<b>Art Unit</b> 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This office action is a response to applicant's supplemental appeal brief filed 08/05/2009. Claims 9-20 are currently in the instant application; claims 1-8 are canceled.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-12 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dufosse et al. (US 2003/0068987 A1 of record) in view of Yoshikawa et al. (US 6,262,364).

Regarding claim 9, Dufosse discloses, in Figures 3-5, a portable communication device comprising

a board (100, Figure 4) configured to receive electrical circuits, the board comprising a ground plane (41, Figure 4) and at least one throughhole;

an antenna element (40, Figure 4) provided on a first side of the board;

an acoustic (30) element placed on the board (100) and aligned with the throughhole; and

a seal (60, Figure 4) comprising an electrically conducting material positioned between a cover of the acoustic element (30) and the board (100), wherein the seal (60)

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is connected to the ground plane (41) of the board to enhance the efficiency of the antenna (40).

Dufosse does not disclose that the seal is a mesh.

Yoshikawa discloses, in Figure 10, the seal being a mesh.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the seal of Dufosse with the seal being a mesh as taught by Yoshikawa in order to achieve a compact wireless device (see Dufosse, par. [0010]).

Regarding claim 10, as applied to claim 9, Dufosse/Yoshikawa disclose, (Dufosse, in Figure 4), wherein the antenna element (40) is positioned with at least a portion at a distance above the board (100), for defining an antenna volume between the board (100) and the antenna element (40), and wherein the at least one hole is provided under the antenna element (40).

Regarding claim 11, as applied to claim 10, Dufosse/Yoshikawa disclose, (Dufosse, in Figure 4), wherein the acoustic element (see 39, Figure 4) is positioned on a second side of the board (100).

Regarding claim 12, as applied to claim 11, Dufosse/Yoshikawa disclose, (Dufosse, in Figure 4), wherein an acoustic box (43) associated with the acoustic element (30) is positioned in the antenna volume.

Regarding claim 15, as applied to claim 9, Dufosse/Yoshikawa discloses, (Dufosse, in Figure 2A), wherein the antenna (40) element comprises a PIFA antenna element.

Regarding claim 16, as applied to claim 9, Dufosse/Yoshikawa disclose, (Dufosse, in Figure 5), further comprising a cellular phone.

Regarding claims 17-18, as applied to claim 9, Dufosse/Yoshikawa discloses, (Dufosse, in Figure 3 and paragraph [0033], lines 9-13), wherein the acoustic element comprises a plastic casing (33, 34).

Regarding claim 19, applied to claim 9, Dufosse/Yoshikawa discloses, (Dufosse, Figure 4), wherein the acoustic element cover (33, 34) comprises a non-conductive cover.

4. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dufosse in view of Yoshikawa and further in view Stewart et al. (US 6,266,019 B1 of record).

Regarding claims 13-14, Dufosse/Yoshikawa disclose every feature of claimed invention except for using at least one electrically conducting springs; or gasket.

Stewart discloses, in col. 5, lines 15-20, using at least one electrically conducting springs; or an electrically conducting gasket.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a well known electrical connection such as conductive spring or gasket as teaching of Stewart in the device of Dufosse/Yoshikawa to achieve the claimed invention in order to provide the electrical connection for the device.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dufosse in view of Yoshikawa and further in view Begin (US 6,879,849 B2 of record).

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Regarding claim 20, Dufosse/Yoshikawa disclose every feature of claimed invention as expressly recited in claim 1, except for the mesh being connected to the ground via solder.

Begic discloses, in col. 3, lines 52-57, electrical connection via solder.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the solder of Begic in the device of Dufosse to achieve the claimed invention in order to provide the electrical connection for the device.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 9-20 have been considered but are moot in view of the new ground(s) of rejection. This action is made non-final.

### ***Inquiry***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEU HIEN T. DUONG whose telephone number is (571)272-8980. The examiner can normally be reached on Monday - Friday, from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/08/09

/D. T. D./

Examiner, Art Unit 2821

/Tan Ho/

Primary Examiner, Art Unit 2821